

- 1. A method comprising: negatively biasing a spatial light modulator; and reversing the bias.
- 1 2. The method of claim 1 including biasing a top 2 plate and a pixel electrode.
- 1 3. The method of claim 2 including biasing said top 2 plate to a negative voltage.
- 1 4. The method of claim 3 including maintaining said 2 pixel electrode at a positive voltage.
- 5. The method of claim 4 including biasing said pixel electrode across its full dynamic range.
- 1 6. The method of claim 1 including alternately 2 biasing the top plate negatively and positively.
- 1 7. / A spatial light modulator comprising:

- a pixel electrode, said top plate and said pixel
- a drive circuit to apply positive and negative bias potentials to one of said electrode and said top plate.

- 1 8. The spatial light modulator of claim 7 including 2 a drive circuit to apply a negative bias potential to said 3 top plate.
- 9. The spatial modulator of claim 7 wherein said spatial light modulator is a liquid crystal over silicon spatial light modulator.
- 1 10. The spatial light modulator of claim 7 wherein 2 said drive circuit applies positive and negative bias 3 potentials in alternating frames.
- 1 11. The spatial light modulator of claim 8 wherein 2 said top plate is formed of indium tin oxide.
- 1 12. A method comprising:
- 2 applying a positive bias to a spatial light
- 3 modulator in a negative frame; and
- 4 applying/a negative bias to a spatial light
- 5 modulator during a positive frame to reduce the magnitude
- of the positive voltage that is necessary to bias the
- 7 spatial light modulator.

- 1 13. The method of claim $\frac{1}{12}$ including biasing a top
- 2 plate and a pixel electrode.
- 1 14. The method of claim 13 including biasing said top
- 2 plate to a negative volta/ge.
- 1 15. The method of/claim 14 including maintaining said
- 2 pixel electrode at a positive voltage.